UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,443	12/20/2001	Randal L. Dunn	95-474	5112

23164 7590 03/21/2008

LEON R TURKEVICH
2000 M STREET NW
7TH FLOOR
WASHINGTON, DC 200363307

EXAMINER	
HAILE, FEBEN	
ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
03/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/022,443	DUNN ET AL.	
	Examiner	Art Unit	
	Feben M. Haile	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-11,13-21,23,31 and 33-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-11, 13-21, 23, 31, and 33-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In view of applicant's amendment filed February 26, 2008, the status of the application is still pending with respect to claims 1, 3-11, 13-21, 23, 31, and 33-47.

2. The amendment filed is insufficient to overcome the rejection of claims 1, 3-11, 13-21, 23, 31, and 33-47 based upon previously cited references Prasad et al. (US 2003/0016684), Jeong (US 5,912,628), Allison et al. (US 2004/0081206), Lee (US 2001/0008532), and newly discovered references Miller et al. (US 6,940,866), Ramos et al. (US 2002/0186702) as set forth in this new Office action because the claims fail to further clarify a distinction between the Applicants invention and the cited references, thus the subject matter is not patentable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5-7, 11, 15-17, 21, 31, 35-37, and 41-43 rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad et al. (US 2003/0016684), hereinafter referred to as Prasad, in view of Jeong (US 5,912,628), hereinafter referred to as Jeong, in view of Miller et al. (US 6,940,866), hereinafter referred to as Miller.

Regarding claim 1, Prasad discloses a routing table configured for storing message class entries identifying respective message classes, each message class entry specifying at least one destination link identifier for a corresponding destination link assigned to the corresponding message class **(figure 4 unit 210, figure 5, and page 3 paragraph 0033; a routing table storing routing codes and associated point codes);** and a processor configured for selecting one of the message class entries based on determining the corresponding identified message class matches the specific message class of the received signaling message, the one message class entry specifying the corresponding destination link identifier for the one destination link **(figure 4 unit 200 and page 3 paragraphs 0030-0031; a processor reviews the routing table to determine a routing context associated with the routing code and executes a transmission process accordingly)**. As the Examiner interprets the claim in their broadest sense, (1) the "routing context" could be equivalent to a "message class" because both are used for the organization of the signaling messages into categories for treatment (2) the "point code" could be equivalent to "link identifier" because both are used to specify destination for signaling messages.

Prasad fails to explicitly suggest selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria.

Jeong teaches selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria **(column 3 lines 12-17; a**

method of transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of classifying a message for signal link selection taught by Jeong into the processor of the signal transfer point disclosed by Prasad. The motivation for such a modification is an improved method of selecting a link for the transmission of a signal message.

Prasad, Jeong, and/or their combination fail to explicitly suggest wherein the destination links are grouped in prescribed linksets having respective linkset identifiers, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers, determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries, and matching the received signaling message to the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry.

Miller teaches wherein the destination links are grouped in prescribed linksets having respective linkset identifiers **(figure 6a; routing table including a point code field corresponding to a linkset field)**, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers **(column 9 lines 14-15; point code field stores point codes to be compared to destination point codes extracted from SS7 messages)**, the processor configured for selecting the one message class entry based on determining a match

between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries **(column 9 lines 26-28; if the destination point code, i.e. 1-1-3, of an incoming message matches the point code field in the routing table the message is routed to the corresponding linkset, i.e. number 1)**, and matching the received signaling message to the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry **(column lines 28-30; linkset number 1 corresponds to a fixed bandwidth)**. As the Examiner interprets the claim in their broadest sense, the "fixed bandwidth" could be equivalent to a type of "message class" because it could be a category for the specific treatment of a signaling message.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of interconnecting signaling points taught by Miller into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection suggested by Jeong. The motivation for such a modification is a method for interconnecting signaling points that reduces the number of fixed SS7 links.

Regarding claim 4, Miller discloses wherein the prescribed message class selection criteria include classifying the received signaling message based on at least a portion of the destination point code **(column 9 lines 26-30; if the destination point code, i.e. 1-1-3, of an incoming message matches the point code field in the routing table the message is routed to the corresponding linkset, i.e. number 1, which corresponds to a fixed bandwidth)**.

Regarding claim 5, Prasad discloses a plurality of linkset interfaces configured for receiving signaling messages from respective input linksets **(figure 2 links A, B, & C and figure 4 units 120, 130, & 140)**.

Jeong teaches the prescribed message class selection criteria including classifying the received signaling message based on identifying one of a plurality of input linksets having supplied the received signaling message **(column 3 lines 12-17; transmitting signal messages over links where a criterion classifies the links into two types, i.e. 0 or 1, where the signal message contains a SLS value equivalent to the binary code of the selected link and classifying the message as belonging to one of the links according to that value)**.

Regarding claim 6, Jeong discloses wherein the prescribed message class selection criteria include classifying the received signaling message based on prescribed user-selected selection criteria **(column 3 lines 12-17; transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types)**.

Regarding claim 7, Jeong discloses wherein the user-selected selection criterion includes a user-selected data pattern **(column 3 lines 12-17; the criterion used for classifying a signal message is obtained by dividing a value contained in the signal message by two, wherein the value is the decimal equivalent of the binary code for the signal message)**.

Regarding claim 41, Jeong discloses wherein the classifying includes classifying the received signaling message independent of any information in the routing

table **(column 3 lines 12-17; the criterion used for classifying a signal message is obtained by dividing a value contained in the signal message by two, wherein the value is the decimal equivalent of the binary code for the signal message)**.

Regarding claim 11, Prasad discloses a routing table configured for storing message class entries identifying respective message classes, each message class entry specifying at least one destination link identifier for a corresponding destination link assigned to the corresponding message class **(figure 4 unit 210, figure 5, and page 3 paragraph 0033; a routing table storing routing codes and associated point codes);** and a processor configured for selecting one of the message class entries based on determining the corresponding identified message class matches the specific message class of the received signaling message, the one message class entry specifying the corresponding destination link identifier for the one destination link **(figure 4 unit 200 and page 3 paragraphs 0030-0031; a processor reviews the routing table to determine a routing context associated with the routing code and executes a transmission process accordingly)**. As the Examiner interprets the claims in their broadest sense, (1) the "routing context" could be equivalent to a "message class" because both are used for the organization of the signaling messages into categories for treatment (2) the "point code" could be equivalent to "link identifier" because both are used to specify destination.

Prasad fails to explicitly suggest selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria.

Jeong teaches selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria **(column 3 lines 12-17; a method of transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of classifying a message for signal link selection taught by Jeong into the processor of the signal transfer point disclosed by Prasad. The motivation for such a modification is an improved method of selecting a link for the transmission of a signal message.

Prasad, Jeong, and/or their combination fail to explicitly suggest wherein the destination links are grouped in prescribed linksets having respective linkset identifiers, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers, determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries, and matching the received signaling message to the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry.

Miller teaches wherein the destination links are grouped in prescribed linksets having respective linkset identifiers **(figure 6a; routing table including a point code field corresponding to a linkset field)**, the routing table further including linkset entries including destination point code entries and the respective assigned linkset

identifiers **(column 9 lines 14-15; point code field stores point codes to be compared to destination point codes extracted from SS7 messages)**, the processor configured for selecting the one message class entry based on determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries **(column 9 lines 26-28; if the destination point code, i.e. 1-1-3, of an incoming message matches the point code field in the routing table the message is routed to the corresponding linkset, i.e. number 1)**, and matching the received signaling message to the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry **(column lines 28-30; linkset number 1 corresponds to a fixed bandwidth)**. As the Examiner interprets the claim in their broadest sense, the "fixed bandwidth" could be equivalent to a type of "message class" because it could be a category for the specific treatment of a signaling message.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of interconnecting signaling points taught by Miller into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection suggested by Jeong. The motivation for such a modification is a method for interconnecting signaling points that reduces the number of fixed SS7 links.

Regarding claim 14, Miller discloses wherein the prescribed message class selection criteria include classifying the received signaling message based on at least a portion of the destination point code **(column 9 lines 26-30; if the destination point**

code, i.e. 1-1-3, of an incoming message matches the point code field in the routing table the message is routed to the corresponding linkset, i.e. number 1, which corresponds to a fixed bandwidth).

Regarding claim 15, Prasad discloses a plurality of linkset interfaces configured for receiving signaling messages from respective input linksets **(figure 2 links A, B, & C and figure 4 units 120, 130, & 140)**.

Jeong teaches the prescribed message class selection criteria including classifying the received signaling message based on identifying one of a plurality of input linksets having supplied the received signaling message **(column 3 lines 12-17; transmitting signal messages over links where a criterion classifies the links into two types, i.e. 0 or 1, where the signal message contains a SLS value equivalent to the binary code of the selected link and classifying the message as belonging to one of the links according to that value)**.

Regarding claim 16, Jeong discloses wherein the prescribed message class selection criteria include classifying the received signaling message based on prescribed user-selected selection criteria **(column 3 lines 12-17; transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types)**.

Regarding claim 17, Jeong discloses wherein the user-selected selection criterion includes a user-selected data pattern **(column 3 lines 12-17; the criterion used for classifying a signal message is obtained by dividing a value contained in**

the signal message by two, wherein the value is the decimal equivalent of the binary code for the signal message).

Regarding claim 42, Jeong discloses wherein the classifying includes classifying the received signaling message independent of any information in the routing table **(column 3 lines 12-17; the criterion used for classifying a signal message is obtained by dividing a value contained in the signal message by two, wherein the value is the decimal equivalent of the binary code for the signal message)**.

Regarding claim 21, Prasad discloses a routing table configured for storing message class entries identifying respective message classes, each message class entry specifying at least one destination link identifier for a corresponding destination link assigned to the corresponding message class **(figure 4 unit 210, figure 5, and page 3 paragraph 0033; a routing table storing routing codes and associated point codes);** and a processor configured for selecting one of the message class entries based on determining the corresponding identified message class matches the specific message class of the received signaling message, the one message class entry specifying the corresponding destination link identifier for the one destination link **(figure 4 unit 200 and page 3 paragraphs 0030-0031; a processor reviews the routing table to determine a routing context associated with the routing code and executes a transmission process accordingly)**. As the Examiner interprets the claims in their broadest sense, (1) the "routing context" could be equivalent to a "message class" because both are used for the organization of the signaling messages

into categories for treatment (2) the "point code" could be equivalent to "link identifier" because both are used to specify destination.

Prasad fails to explicitly suggest selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria.

Jeong teaches selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria **(column 3 lines 12-17; a method of transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of classifying a message for signal link selection taught by Jeong into the processor of the signal transfer point disclosed by Prasad. The motivation for such a modification is an improved method of selecting a link for the transmission of a signal message.

Prasad, Jeong, and/or their combination fail to explicitly suggest wherein the destination links are grouped in prescribed linksets having respective linkset identifiers, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers, determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries, and matching the received signaling message to

the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry.

Miller teaches wherein the destination links are grouped in prescribed linksets having respective linkset identifiers **(figure 6a; routing table including a point code field corresponding to a linkset field)**, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers **(column 9 lines 14-15; point code field stores point codes to be compared to destination point codes extracted from SS7 messages)**, the processor configured for selecting the one message class entry based on determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries **(column 9 lines 26-28; if the destination point code, i.e. 1-1-3, of an incoming message matches the point code field in the routing table the message is routed to the corresponding linkset, i.e. number 1)**, and matching the received signaling message to the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry **(column lines 28-30; linkset number 1 corresponds to a fixed bandwidth)**. As the Examiner interprets the claim in their broadest sense, the "fixed bandwidth" could be equivalent to a type of "message class" because it could be a category for the specific treatment of a signaling message.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of interconnecting signaling points taught by Miller into the processor of the signal transfer point disclosed by Prasad as modified

by the method of classifying a message for signal link selection suggested by Jeong. The motivation for such a modification is a method for interconnecting signaling points that reduces the number of fixed SS7 links.

Regarding claim 43, Jeong discloses wherein the classifying includes classifying the received signaling message independent of any information in the routing table **(column 3 lines 12-17; the criterion used for classifying a signal message is obtained by dividing a value contained in the signal message by two, wherein the value is the decimal equivalent of the binary code for the signal message)**.

Regarding claim 31, Prasad discloses means for storing message class entries identifying respective message classes, each message class entry specifying at least one destination link identifier for a corresponding destination link assigned to the corresponding message class **(figure 4 unit 210, figure 5, and page 3 paragraph 0033; a routing table storing routing codes and associated point codes);** and a processor configured for selecting one of the message class entries based on determining the corresponding identified message class matches the specific message class of the received signaling message, the one message class entry specifying the corresponding destination link identifier for the one destination link **(figure 4 unit 200 and page 3 paragraphs 0030-0031; a processor reviews the routing table to determine a routing context associated with the routing code and executes a transmission process accordingly)**. As the Examiner interprets the claims in their broadest sense, (1) the "routing context" could be equivalent to a "message class" because both are used for the organization of the signaling messages into categories

for treatment (2) the "point code" could be equivalent to "link identifier" because both are used to specify destination.

Prasad fails to explicitly suggest selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria.

Jeong teaches selecting one of the destination links based on the processor classifying the received signaling message as assigned to the corresponding message class based on prescribed message class selection criteria **(column 3 lines 12-17; a method of transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of classifying a message for signal link selection taught by Jeong into the processor of the signal transfer point disclosed by Prasad. The motivation for such a modification is an improved method of selecting a link for the transmission of a signal message.

Prasad, Jeong, and/or their combination fail to explicitly suggest wherein the destination links are grouped in prescribed linksets having respective linkset identifiers, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers, determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries, and matching the received signaling message to

the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry.

Miller teaches wherein the destination links are grouped in prescribed linksets having respective linkset identifiers **(figure 6a; routing table including a point code field corresponding to a linkset field)**, the routing table further including linkset entries including destination point code entries and the respective assigned linkset identifiers **(column 9 lines 14-15; point code field stores point codes to be compared to destination point codes extracted from SS7 messages)**, the processor configured for selecting the one message class entry based on determining a match between a destination point code value in the received signaling message and the destination point code entry of one of the linkset entries **(column 9 lines 26-28; if the destination point code, i.e. 1-1-3, of an incoming message matches the point code field in the routing table the message is routed to the corresponding linkset, i.e. number 1)**, and matching the received signaling message to the one message class entry specifying the at least one destination link within the one linkset identified by the one linkset entry **(column lines 28-30; linkset number 1 corresponds to a fixed bandwidth)**. As the Examiner interprets the claim in their broadest sense, the "fixed bandwidth" could be equivalent to a type of "message class" because it could be a category for the specific treatment of a signaling message.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of interconnecting signaling points taught by Miller into the processor of the signal transfer point disclosed by Prasad as modified

by the method of classifying a message for signal link selection suggested by Jeong. The motivation for such a modification is a method for interconnecting signaling points that reduces the number of fixed SS7 links.

Regarding claim 35, Prasad discloses a plurality of linkset interfaces configured for receiving signaling messages from respective input linksets **(figure 2 links A, B, & C and figure 4 units 120, 130, & 140)**.

Jeong teaches the prescribed message class selection criteria including classifying the received signaling message based on identifying one of a plurality of input linksets having supplied the received signaling message **(column 3 lines 12-17; transmitting signal messages over links where a criterion classifies the links into two types, i.e. 0 or 1, where the signal message contains a SLS value equivalent to the binary code of the selected link and classifying the message as belonging to one of the links according to that value)**.

Regarding claim 36, Jeong discloses wherein the prescribed message class selection criteria include classifying the received signaling message based on prescribed user-selected selection criteria **(column 3 lines 12-17; transmitting a signal message where a link for transmission is selected using a criterion that classifies the message into two types)**.

Regarding claim 37, Jeong discloses wherein the user-selected selection criterion includes a user-selected data pattern **(column 3 lines 12-17; the criterion used for classifying a signal message is obtained by dividing a value contained in**

the signal message by two, wherein the value is the decimal equivalent of the binary code for the signal message).

4. Claims 3, 13, 23, and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad et al. (US 2003/0016684), hereinafter referred to as Prasad, in view of Jeong (US 5,912,628), hereinafter referred to as Jeong, in view of Miller et al. (US 6,940,866), hereinafter referred to as Miller, in view of Ramos et al. (US 2002/0186702), hereinafter referred to as Ramos.

Regarding claim 3, Prasad discloses the received signaling message is identified by the processor as corresponding to a message class having a plurality of the destination links assigned **(figure 4 unit 200 and page 3 paragraphs 0030-0031; a processor reviews the routing table to determine routing contexts associated with the routing codes)**.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest the routing table further including a signaling link selection entry associated with a corresponding one of the destination link identifiers, the processor configured for selecting the one message class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries.

Ramos teaches the routing table further including a signaling link selection entry associated with a corresponding one of the destination link identifiers **(page 5 table 4; the assignment of SLS codes to each signaling link)**, the processor configured for

selecting the one message class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries **(page 3 paragraph 0017; selecting a link set according to the signaling link selection code)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of link selection taught by Ramos into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is to improve message load distribution within link sets and remove the prior art limitation of the number of load shared link sets and signaling links for a given destination.

Regarding claim 13, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein storing in the routing table further including a signaling link selection entry associated with a corresponding one of the destination link identifiers, selecting the one message class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries.

Ramos teaches wherein storing in the routing table further including a signaling link selection entry associated with a corresponding one of the destination link identifiers **(page 5 table 4; the assignment of SLS codes to each signaling link)**, selecting the

one message class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries **(page 3 paragraph 0017; selecting a link set according to the signaling link selection code)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of link selection taught by Ramos into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is to improve message load distribution within link sets and remove the prior art limitation of the number of load shared link sets and signaling links for a given destination.

Regarding claim 23, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest storing in the routing table a signaling link selection entry associated with a corresponding one of the destination link identifiers, selecting the one message class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries.

Ramos teaches storing in the routing table a signaling link selection entry associated with a corresponding one of the destination link identifiers **(page 5 table 4; the assignment of SLS codes to each signaling link)**, selecting the one message

class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries **(page 3 paragraph 0017; selecting a link set according to the signaling link selection code)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of link selection taught by Ramos into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is to improve message load distribution within link sets and remove the prior art limitation of the number of load shared link sets and signaling links for a given destination.

Regarding claim 33, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest storing a signaling link selection entry associated with a corresponding one of the destination link identifiers, selecting the one message class entry further based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries.

Ramos teaches storing a signaling link selection entry associated with a corresponding one of the destination link identifiers **(page 5 table 4; the assignment of SLS codes to each signaling link)**, selecting the one message class entry further

based on a match between a signaling link selection value in the received signaling message and one of the signaling link selection entries **(page 3 paragraph 0017; selecting a link set according to the signaling link selection code)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of link selection taught by Ramos into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is to improve message load distribution within link sets and remove the prior art limitation of the number of load shared link sets and signaling links for a given destination.

5. Claims 8, 18, 38, and 44-47 rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad et al. (US 2003/0016684), hereinafter referred to as Prasad, in view of Jeong (US 5,912,628), hereinafter referred to as Jeong, in view of Miller et al. (US 6,940,866), hereinafter referred to as Miller, in view of Allison et al. (US 2004/0081206), hereinafter referred to as Allison.

Regarding claim 8, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the prescribed message class selection criteria include classifying the received

signaling message based on a service indicator value from the received signaling message.

Allison teaches wherein the prescribed message class selection criteria include classifying the received signaling message based on a service indicator value from the received signaling message **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved for service selection in a telecommunications signaling network.

Regarding claim 18, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the prescribed message class selection criteria include classifying the received signaling message based on a service indicator value from the received signaling message.

Allison teaches wherein the prescribed message class selection criteria include classifying the received signaling message based on a service indicator value from the

received signaling message **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved for service selection in a telecommunications signaling network.

Regarding claim 38, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the prescribed message class selection criteria include classifying the received signaling message based on a service indicator value from the received signaling message.

Allison teaches wherein the prescribed message class selection criteria include classifying the received signaling message based on a service indicator value from the received signaling message **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved for service selection in a telecommunications signaling network.

Regarding claim 44, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the classifying includes classifying the received signaling message independent of any information in the routing table.

Allison teaches wherein the classifying includes classifying the received signaling message independent of any information in the routing table **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method interconnecting signaling points suggested by Miller. The motivation for such a

modification is an improved for service selection in a telecommunications signaling network.

Regarding claim 45, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the processor is configured for classifying includes classifying the received signaling message independent of any signaling link selection value within the received signaling message.

Allison teaches wherein the processor is configured for classifying includes classifying the received signaling message independent of any signaling link selection value within the received signaling message **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved for service selection in a telecommunications signaling network.

Regarding claim 46, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the classifying includes classifying the received signaling message independent of any signaling link selection value within the received signaling message.

Allison teaches wherein the classifying includes classifying the received signaling message independent of any signaling link selection value within the received signaling message **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved for service selection in a telecommunications signaling network.

Regarding claim 47, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the means for classifying includes classifying the received signaling message independent of any signaling link selection value within the received signaling message.

Allison teaches wherein the means for classifying includes classifying the received signaling message independent of any signaling link selection value within the received signaling message **(page 4 column 0034; a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to determine the type of message)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the discrimination function taught by Allison into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved for service selection in a telecommunications signaling network.

6. Claims 9-10, 19-20, and 39-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad et al. (US 2003/0016684), hereinafter referred to as Prasad, in view of Jeong (US 5,912,628), hereinafter referred to as Jeong, in view of Miller et al. (US 6,940,866), hereinafter referred to as Miller, in view of Lee (US 2001/0008532), hereinafter referred to as Lee.

Regarding claim 9, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the prescribed message class selection criteria include classifying the received

signaling message based on global title translation (GTT) parameters retrieved from the received signaling message.

Lee teaches wherein the prescribed message class selection criteria include classifying the received signaling message based on global title translation (GTT) parameters retrieved from the received signaling message **(page 1 paragraph 0006; a No. 7 gateway that provides global title translation services represented by unique numbers; page 1 paragraph 0007; where theses services are classified according to these values)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the No. 7 gateway taught by Lee into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved method of a mapping function for different translation types in a No. 7 gateway signaling network.

Regarding claim 10, Lee discloses wherein the prescribed message class selection criteria include classifying the received message based on a Global Title Address (GTA) from the GTT parameters **(page paragraph 0006-0007; that unique numbers represent global title translation services for classification purposes)**. As the Examiner interprets the claims in their broadest sense, one could identify the "unique numbers" as the Global Title Address because both are used for the organization of the signaling messages into categories for treatment.

Regarding claim 19, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the prescribed message class selection criteria include classifying the received signaling message based on global title translation (GTT) parameters retrieved from the received signaling message.

Lee teaches wherein the prescribed message class selection criteria include classifying the received signaling message based on global title translation (GTT) parameters retrieved from the received signaling message **(page 1 paragraph 0006; a No. 7 gateway that provides global title translation services represented by unique numbers; page 1 paragraph 0007; where theses services are classified according to these values)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the No. 7 gateway taught by Lee into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such a modification is an improved method of a mapping function for different translation types in a No. 7 gateway signaling network.

Regarding claim 20, Lee discloses wherein the prescribed message class selection criteria include classifying the received message based on a Global Title Address (GTA) from the GTT parameters **(page paragraph 0006-0007; that unique**

numbers represent global title translation services for classification purposes). As the Examiner interprets the claims in their broadest sense, one could identify the "unique numbers" as the Global Title Address because both are used for the organization of the signaling messages into categories for treatment.

Regarding claim 39, Prasad as modified by Jeong and Miller disclose the limitations of the base claims.

Prasad, Jeong, Miller, and/or their combination fail to explicitly suggest wherein the prescribed message class selection criteria include classifying the received signaling message based on global title translation (GTT) parameters retrieved from the received signaling message.

Lee teaches wherein the prescribed message class selection criteria include classifying the received signaling message based on global title translation (GTT) parameters retrieved from the received signaling message **(page 1 paragraph 0006; a No. 7 gateway that provides global title translation services represented by unique numbers; page 1 paragraph 0007; where theses services are classified according to these values)**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of the No. 7 gateway taught by Lee into the processor of the signal transfer point disclosed by Prasad as modified by the method of classifying a message for signal link selection taught by Jeong and the method of interconnecting signaling points suggested by Miller. The motivation for such

a modification is an improved method of a mapping function for different translation types in a No. 7 gateway signaling network.

Regarding claim 40, Lee discloses wherein the prescribed message class selection criteria include classifying the received message based on a Global Title Address (GTA) from the GTT parameters **(page paragraph 0006-0007; that unique numbers represent global title translation services for classification purposes)**. As the Examiner interprets the claims in their broadest sense, one could identify the "unique numbers" as the Global Title Address because both are used for the organization of the signaling messages into categories for treatment.

Allowable Subject Matter

7. Indicated allowability of claims 2-4, 12-14, 22-23, and 32-34 is withdrawn in view of the newly discovered reference(s) to Miller et al. (US 6,940,866), Ramos et al. (US 2002/0186702). Rejections based on the newly cited reference(s) can be found above.

Response to Arguments

8. Applicant's arguments with respect to the rejection(s) of claim(s) 45-47 under 35 USC 112 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Allison et al. (US 2004/0081206). As apparent from the description on page 4 column 0034, i.e. a signaling gateway routing node that includes a discrimination function that examines a service indicator parameter in the received message to

determine the type of message, classification is performed based on a method other than signaling link selection value.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Feben M Haile/
Examiner, Art Unit 2616

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2616